

April 2, 2007

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888

> RE: Docket 3790 – National Grid Gas Energy Efficiency Programs Settlement Agreement

Dear Ms. Massaro:

Enclosed on behalf of National Grid¹, the Rhode Island Division of Public Utilities and Carriers, The Energy Council of Rhode Island, the Rhode Island Office of Energy Resources, Energy Consumers Alliance of New England d/b/a People's Power and Light, and Environment Northeast (together, the "Parties"), are ten (10) copies of a Settlement setting forth the Company's proposed gas energy efficiency programs for the years 2007 and 2008. The Parties respectfully request Commission approval of this Settlement. Additionally, the Parties commit to further address the amount of total dollars and number of projects that address combined heat and power.

Thank you very much for your time and attention to this matter. If you have any questions regarding this Settlement, please feel free to contact me at (401) 784-7667.

Very truly yours,

Laura S. Olton

Laura S. Olton

Enclosures

cc: Docket 3790 Service List RI Collaborative Members

¹ The Narragansett Electric Company, d/b/a National Grid (the "Company").

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

)	
In Re: National Grid Gas Energy)	
Efficiency Programs for 2007)	Docket No. 3790
)	

SETTLEMENT OF THE PARTIES

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ATTACHMENTS

- 1. Residential Programs for 2007 and 2008
- 2. Commercial and Industrial Programs for 2007 and 2008
- 3. Bill Impact Analysis
- 4. Funding Sources in 2007 and 2008 by Sector
- Recommendations Guidelines Regarding Self-Directed Gas Demand-Side
 Management Programs for Manufacturing
- $6. \ \ Proposed \ Budgets-2007 \ and \ 2008$
- 7. Target Shareholder Incentive
- 8. Calculation of Program Cost-Effectiveness and Goals

I. Introduction

2 This Stipulation and Settlement ("Settlement") is jointly submitted and entered into by

- 3 the Rhode Island Division of Public Utilities and Carriers ("Division"), The Energy
- 4 Council of Rhode Island ("TEC-RI"), the Rhode Island Office of Energy Resources
- 5 ("RIOER"), Energy Consumers Alliance of New England d/b/a People's Power and Light
- 6 ("PP&L"), Environment Northeast ("ENE") and The Narragansett Electric Company,
- 7 d/b/a National Grid ("National Grid" or "Company") (together, the "Parties"), and
- 8 addresses all issues raised by the Parties concerning the Company's gas energy efficiency
- 9 ("EE") Programs for the years 2007 and 2008.

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11 The Comprehensive Energy Conservation, Efficiency and Affordability Act of 2006

- 12 ("2006 Act") established the following requirement: "each gas distribution company shall
- include, with approval of the Commission, a charge of up to fifteen cents (\$0.15) per
- decatherm delivered to demand side management programs, including, but not limited to,
- programs for cost-effective energy efficiency, energy conservation, combined heat and
- power systems, and weatherization services for low income households." The 2006 Act
- also provides that the Commission may except from this charge: (1) gas used for
- distribution generation; and (2) gas used for manufacturing processes where the customer
- 19 has established a self-directed program to invest in and achieve effective energy
- 20 efficiency. Such programs would need approval from, and periodic reviews by, the
- 21 Commission. Additional provisions require that an amount not to exceed two percent
- 22 (2%) of such funds on an annual basis be allocated to the Energy Efficiency and
- 23 Resources Management Council ("Council") ¹ for retention of expert consultants and
- 24 reasonable administrative costs.

¹ The 2006 Act specifies the purpose of the Council is to: "(1) Evaluate and make recommendations, including, but not limited to, plans and programs, with regard to the optimization of energy efficiency, energy conservation, energy resource development; and the development of a plan for least-cost procurement for Rhode Island; (2) Provide consistent, comprehensive, informed and publicly accountable stake-holder involvement in energy efficiency, energy conservation, and energy resource management; and (3) Monitor and evaluate the effectiveness of programs to achieve energy efficiency, energy conservation, and diversification of energy resource."

This Settlement describes efforts proposed for 2007 and 2008 to comply with the requirements established in the 2006 Act. The Parties acknowledge that the Company's initial filing in this docket proposed gas EE programs for calendar year 2007. With the understanding that the Company will not begin implementation of the programs until mid-2007, the Parties believe that it is more appropriate to establish programs with budgets covering an 18-month period. This will allow the Company to have at least a year's experience delivering these new programs prior to developing plans for future periods while also allowing the Company, in consultation with the other Parties, to develop a more integrated Plan and filing to provide to the Commission beginning in 2009.

II. 2007 and 2008 Gas Energy Efficiency Programs

The gas EE programs for 2007 and 2008 offer energy efficiency opportunities to all customer segments. Many of the proposed programs are currently offered by KeySpan Energy Delivery ("KeySpan") and GasNetworks², which will allow the Company to build on successful efforts by others. In addition, the Company anticipates contracting for program support services with KeySpan in an effort to expedite the effective roll-out of proposed programs.

The Parties recognize that joint delivery of gas and electric efficiency programs might reduce marketing and implementation costs for the programs and increase customer savings and satisfaction. Therefore, where feasible, proposed program services will be integrated with the already approved electric energy efficiency programs in Rhode Island.

² GasNetworks is a regional collaborative of natural gas distribution companies that coordinate natural gas energy efficiency programs throughout Maine, Massachusetts and New Hampshire. The benefit of GasNetworks membership is that it allows each participating company to offer regional programs at a lower overall cost to its customers. The GasNetworks programs are consistent wherever they have been offered. The GasNetworks programs have received several national awards from the American Council for an Energy Efficient Economy as exemplary examples of natural gas energy efficiency programs.

1	The Parties agree to the Company's 2007 and 2008 EE Programs described below ³ :
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3	A. Residential Programs
4	The Company will implement several programs for residential customers
5	including the EnergyWise Program, Single Family Low Income Services, the
6	High-Efficiency Heating Program, the High-Efficiency Water Heating Program,
7	the ENERGY STAR® Programmable Thermostat Program, the Energy Analysis:
8	Internet Audit Program, Building Practices and Demonstration Program, and New
9	Construction and ENERGY STAR® Homes. Descriptions of these programs are
10	provided in Attachment 1.
11	
12	B. Commercial and Industrial Programs ⁴
13	The Company will implement the following programs designed to provide
14	commercial and industrial customers with gas energy efficiency services:
15	Commercial Energy Efficiency Program, Commercial High Efficiency Heating
16	Program, Economic Redevelopment Program, Trade Ally Training Program,
17	Energy Audit and Engineering Services, Business Energy Analyzer, Building
18	Practices and Demonstration Program, and The Emerald Network. These
19	programs are described in Attachment 2.
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³ Throughout the program period, the Parties may consider additional enhancements beyond those identified herein as more information becomes available to support an informed review of those potential changes.

⁴ The existing gas demand-side management program for commercial and industrial customers (Smart Growth Program) designed to promote the demand for natural gas during non-peak months of the year will continue as it currently exists and is not incorporated into the new gas energy efficiency programs funded by the energy efficiency surcharge. This program will continue to be funded through base rate collections. This is a change from the original filing submitted by the Company.

III. Budgets and Funding Sources

A.	2007	and 2008	Energy	Efficiency	Program	Funding	Sources
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With Commission approval, the Company instituted a gas energy efficiency surcharge of \$0.063 per decatherm effective January 1, 2007. The Parties request that the Commission authorize the Company to increase the energy efficiency surcharge to \$0.114 per decatherm effective July 1, 2007. The Parties recommend this increase to ensure that programs can ramp up to meet customer needs. In particular, the proposed budgets include a significant increase in funding for the Single Family Low Income Services Program as requested by OER and inclusion of a commitments budget to support ongoing program marketing efforts with Commercial and Industrial customers. A bill impact analysis reflecting this change is provided in Attachment 3.

The Parties agree that the 2007 and 2008 budgets should be funded from the following sources: (1) an energy efficiency surcharge of \$0.063 per decatherm applicable in January through June 2007; (2) an energy efficiency surcharge of \$0.114 per decatherm applicable in July 2007 through December 2008; (3) interest accrued on the fund balance during this period due to timing differences for collections compared to expenditures; and (4) current base rate collections for Low Income Weatherization.⁵ The sources of funding for the 2007 and 2008 EE Programs are shown in Attachment 4.

The proposed budget for 2007 – 2008 program period is approximately equal to 67% of the maximum funding allowed under the 2006 Act. The Parties agree that this amount of funding is appropriate, since program services may not be initiated until mid-year and recognizing that the Company is initiating new programs and services that will require time to ramp up. The Parties support increasing the

⁵ Funding for Low Income Weatherization is currently built into base rates. See Docket No. 3401 and Commission Order No. 17381.

energy efficiency surcharge over time commensurate with customer demand for program services up to the maximum amount allowed under the law.

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B. Exceptions to the Energy Efficiency Surcharge

 The Parties agree that gas used for distributed generation (excluding natural gas used by emergency generators) will not be subject to the energy efficiency surcharge when gas used for that purpose can be clearly identified through uniquely metered use and when so requested in writing by the customer.

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2. The 2006 Act allows the Commission to exempt gas used for manufacturing processes from the energy efficiency surcharge where the customer has established a self-directed program to invest in and achieve best effective energy efficiency in accordance with a plan approved by the Commission and subject to periodic review and approval by the Commission. The Parties to this Settlement request that the Commission establish an administratively simple procedure for such exemption, whereby a manufacturer who so chooses may submit its self-directed program and the required annual reports for approval. While this process may be addressed in another proceeding, the Parties have developed recommendations about the process in hopes that these recommendations will assist the Commission (see Attachment 5). The Parties recognize that the process that will be established by the Commission for self-directed programs may need to be reviewed and modified after the Commission has accumulated sufficient experience with these programs.

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C. Budgets

The Parties agree that the portfolio of gas EE programs and services for 2007 and 2008 will have an overall projected budget of approximately \$7.5 million. The

Parties agree to segment the budget into two sectors: residential; and commercial and industrial. Proposed sector and program budgets are provided in

Attachment 6.

The Parties agree that the Company should make every attempt to spend or commit all the funds available for EE in this period, including any increases in the fund balance due to increased sales or other factors. The Parties also agree to review the status of program budgets regularly to assess whether they are likely to come to a successful completion. If not, the Parties agree to review the advisability of transferring funds to other programs where the money could be more effectively used.

D. Transferring of Funds

The Parties will regularly review the amount of funds needed and available for each program and will transfer monies as needed. Transfers during the program year may occur as follows:

- a. Within a sector, the Company may independently transfer up to 10% of proposed funding for a program to another program to better meet customer demand for program services. Transfers of more than 10% will require prior Division approval.
- b. From one sector to another, the Company can transfer funds so long as the transfers from a sector reduce the approved budget for that sector by 20% or less. Division approval is required for such a transfer of funds. Transfers that would reduce a sector's budget by more than 20% in aggregate (over the course of the program year) will require Commission approval.

For transfers requiring Division, but not Commission, approval, the Parties will inform the Commission about all the transfers, both between sectors and within sectors, in a timely fashion.

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IV. Incentive

6 The shareholder incentive mechanism applicable to Company EE efforts in 2007 - 2008

7 is modeled after the savings portion of the performance based shareholder incentive

mechanism currently in place for electric energy efficiency program efforts in Rhode

Island. The proposed target incentive is equal to 4.40% of the eligible budget. The

eligible budget includes all program expenses shown in Attachment 6, except for the

commitments budget and the amount budgeted for the target shareholder incentive.

12 Therefore, the total target incentive for 2007 - 2008 is 4.40% of approximately \$6.6

million, or \$288,734, as shown in Attachment 7.

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A. Savings

The threshold performance level for energy savings by sector will be set at 60% of the annual energy savings goal for the sector. The Company must attain at least this threshold level of savings in the sector before it can earn an incentive related to achieved energy savings in the sector. The Company will have the ability to earn an incentive for each MMBTU saved, once threshold savings for the sector are achieved, up to 100% of the target savings. The incentive per MMBTU saved by sector is provided in Attachment 7.

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Energy savings goals by sector reflect the expected cost of savings in each sector informed by results achieved by other gas EE providers in other New England

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⁶ In 2009 and later years, once the Company has established some baseline cost and savings goals for each of the proposed programs, the Collaborative will discuss providing the Company with the ability to earn an incentive for each MMBTU saved above 100% of target savings.

1 jurisdictions. These goals have been carefully reviewed by the Collaborative to 2 ensure that they represent reasonable goals for the year. 3 4 The threshold, calculated cap, and incentive for a particular sector will be 5 recalculated if the assumptions used to develop savings goals change because of 6 completed evaluation studies. If that occurs, the Company will recalculate 7 savings goals to account for those evaluation findings and will report actual 8 savings on the same basis. The Company will report final program results 9 compared to these revised budgets and goals in its May 31, 2009 Report regarding 10 2007 - 2008 Gas Energy Efficiency Program efforts. 11 12 V. **Cost-Effectiveness** 13 The Company has projected cost-effectiveness for the proposed 2007 through 2008 gas 14 EE programs using a Utility Cost Test to assess expected benefits and costs for its 15 proposed programs. This test is comparable to the test that has been used to assess cost-16 effectiveness for the electric EE programs in Rhode Island. It takes into account program 17 costs compared to the value of the savings expected to be created in the programs over 18 the expected life of those savings. 19 20 Lifetime gas savings have been valued using the avoided gas costs identified in "Avoided 21 Energy Supply Costs in New England," (December 23, 2005) prepared by ICF 22 Consulting for the Avoided-Energy-Supply-Component (AESC) Study Group. This is 23 the same source of the avoided costs that have been used to value electricity savings for 24 the electric EE programs. 25 26 The value of other resource benefits has also been included in the analysis of expected 27 benefits from program efforts, comparable to the inclusion of other resource benefits that 28 are included in the assessment of benefits and costs for the electric efficiency programs. 29 In this case, the other resource benefits include expected electricity savings that are

1 incremental to the electricity savings expected through the electric efficiency programs. 2 The value of these electricity savings has been calculated using the electric avoided costs 3 that were used to assess the cost-effectiveness of electric efficiency programs for 2007. 4 5 Attachment 8 provides the calculation of 2007 through 2008 program period cost-6 effectiveness and goals based on the proposed budgets. Attachment 8 shows that the 7 proposed portfolio of programs is expected to have a benefit/cost ratio of 3.43. In other 8 words, \$3.43 in benefits is expected to be created for each \$1 invested in the programs by 9 the utility. 10 The Parties agree to review alternatives to the current Utility Cost Test for use in 2009. 11 An alternative to the current benefit/cost test may be appropriate given the introduction of 12 least-cost procurement practices required by the 2006 Act, the Regional Greenhouse Gas 13 Initiative, and other energy policy objectives in Rhode Island. 14 15 VI. **Reporting Requirements** 16 The Company will provide quarterly reports to the Parties on the most currently available 17 program performance. These reports will include a comparison of budgets and goals by 18 program to actual expenses and savings on a period-to-date basis. 19 20 The Company will file a report summarizing its 2007 through 2008 gas energy efficiency 21 program efforts with the Commission by May 31, 2009. This report will provide a 22 comparison of budgets and goals to actual expenses and savings by program. The report 23 will also document the Company's performance under the proposed shareholder incentive 24 mechanism. 25 26 VII. **Composition and Role of the Rhode Island Collaborative** 27 A DSM Collaborative (the "Collaborative") has been meeting regularly since 1991 to 28 analyze and inform the Company's electric demand-side management ("DSM") or energy

1 efficiency programs. Members of the Collaborative presently include the Company, the 2 Division, the RIOER, TEC-RI, and PP&L. The Parties agree to expand the focus of the 3 Rhode Island Collaborative that has been involved with electric efficiency programs in 4 Rhode Island to include a focus on gas efficiency programs. The refocused Collaborative 5 will include all of the Parties to this Settlement. 6 7 The Parties plan to assess the advantages and disadvantages of filing a coordinated gas 8 and electric energy efficiency program plan with the Commission addressing proposed 9 efforts beginning with its 2009 plans. In addition, the Parties propose to assess the 10 advantages and disadvantages of filing a multi-year program filing addressing gas and 11 electric EE program efforts beginning in 2009. A multi-year program filing covering the 12 period of 2009 through 2013 would provide National Grid's gas and electric customers 13 with certainty about program continuity and would better support customer budgeting 14 and program participation. 15 16 The Parties may recommend a multi-year filing process to the Commission when the 17 Company files program plans for 2009. We expect that the Company, under a multi-year 18 filing, would file annual updates addressing changes to program designs, budgets, savings 19 costs and benefit-cost analyses. The goal would be to create a more streamlined annual 20 filing on these key issues, addressing only changes relative to the multi-year plan. 21 22 The Parties agree that it is desirable to reach an agreement on the Company's 2009 EE 23 program plans, in order to make a timely filing to the Commission by November 1, 2008, 24 for its review and approval. If the Parties are unable to agree on all or part of the 25 Company's future EE programs, the Company will be free to unilaterally file its 2009 EE 26 program proposal for approval by the Commission on or before November 1, 2008. If 27 the Commission does not have an opportunity to review this program filing by December 28 31, 2008, whether a settlement or a unilateral filing, the Company will continue to offer 29 the 2008 programs until Commission review has occurred.

1	VIII.	Miscellaneous Provisions
2	1.	Other than as expressly stated herein, this Settlement establishes no principles and
3		shall not be deemed to foreclose any Party from making any contention in future
4		proceeding or investigation.
5	2.	This Settlement is the product of settlement negotiations. The content of those
6		negotiations is privileged and all offers of settlement shall be without prejudice to
7		the position of any Party.
8	3.	This Settlement is submitted on the condition that it be approved in full by the
9		Commission, and on further condition that if the Commission does not approve
10		the Settlement in its entirety, the Settlement shall be deemed withdrawn and shall
11		not constitute a part of the record in any proceeding or used for any purpose.
12	4.	Other than as expressly stated herein, the approval of this Settlement by the
13		Commission shall not in any respect constitute a determination as to the merits of
14		any issue in any other proceeding.
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16	The Pa	arties respectfully request the Commission approve this Stipulation and Settlement
17	as a fi	nal resolution of all issues in this proceeding.
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19		Respectfully submitted,
20		THE NARRAGANSETT ELECTRIC COMPANY,
21		D/B/A NATIONAL GRID
22		Laura S. Olton 4/2/07
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24		Laura S. Olton, Esq. Date

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7 8	By its Attorney Date William K. Lueker, Special Assistant Attorney General
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10	THE ENERGY COUNCIL OF RHODE ISLAND
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7 8	By its Attomey Date William K. Lucker, Special Assistant Attorney General
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10	THE ENERGY COUNCIL OF RHODE ISLAND
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24	B. Karina Lutz Date

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ENVIRONMENT NORTHEAST

Service 4/2/07

By its Attorney Date
Dan Sosland

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Sam Krasnow Date

Residential Programs for 2007 and 2008

Introduction

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National Grid proposes to offer five new gas energy efficiency programs, some of which are sponsored in New England by GasNetworks®¹, and to combine efforts with the Company's existing electric energy efficiency programs in the low income, residential retrofit and new construction areas. A brief description of each proposed residential program is provided in the following table:

Pr	oposed Residential Energy Efficiency Programs
EnergyWise Program	Free in home assessment for both single and multi-family homes providing recommendations and technical assistance for the installation of energy saving measures as well as incentives to encourage implementation of recommendations.
Energy Analysis: Internet Audit Program	Free online energy analysis service that makes customized energy efficiency recommendations based on a customer's energy consumption profile.
High-Efficiency Heating Program	\$800 incentive for ENERGY STAR labeled boilers (90% AFUE), \$500 incentive for ENERGY STAR labeled boilers (85% AFUE), \$200 incentive for steam boilers (with electronic ignition, 82% AFUE), \$400 ² incentive for high efficiency furnaces (92% AFUE) with ECM Motor or equivalent and \$100 incentive on furnaces (90% AFUE).
High-Efficiency Water Heating Program	\$300 incentive for indirect water heating system connected to an ENERGY STAR rated natural gas forced hot water boiler and \$300 for tankless/on-demand water heaters (EF .82 or greater with electronic ignition).
ENERGY STAR Programmable Thermostat Program	\$25 incentive each for up to two ENERGY STAR labeled programmable thermostats.

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¹ GasNetworks is a regional collaborative of natural gas distribution companies that coordinate natural gas energy efficiency programs throughout Maine, Massachusetts and New Hampshire. The benefit of GasNetworks membership is that it allows each participating company to offer regional programs at a lower overall cost to its customers. The GasNetworks programs are consistent wherever they have been offered. The GasNetworks programs have received several national awards from the American Council for an Energy Efficient Economy as exemplary examples of natural gas energy efficiency programs.

² \$200 of this incentive will be funded through the electric energy efficiency program approved by the Commission.

New Construction and ENERGY STAR Homes	Free building plans review and certification for new ENERGY STAR residential construction.
Program	
Single Family Low	Free weatherization services provided to income eligible 1-4 unit homes.
Income Services	Operated through the Rhode Island Office of Energy Resources (OER).
Building Practices and	Participate in funding for demonstration projects that apply to new or
Demonstration Program	underutilized technologies.

Additional details about each proposed program are provided below.

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ENERGYWISE PROGRAM 3 Gas energy efficiency funding will be used to expand available measures to gas 4 heating customers through National Grid's Energy Wise program. The program provides 5 a free comprehensive assessment of a customer's energy use and recommends various 6 ways customers can improve their home's energy efficiency. Customers are given a 7 detailed report containing the recommendations of the audit including information about 8 improving the efficiency of their home which may lead to participation in other energy 9 efficiency or DSM programs. This service is currently funded by the legislatively-10 mandated electric DSM charge. During 2007 and 2008, the Company will evaluate the 11 12 best way to fund the combined program with both electric and gas DSM funding. In 2007 and 2008, customers will also receive the free installation of water saving devices 13 14 (low flow showerheads and aerators) for water heated by gas. That measure will be funded by gas energy efficiency funds. 15 16 For 2007 and 2008, the Company proposes to implement a new delivery mechanism for 1-4 unit homes heated with gas. Customers in eligible homes who 17 participate in EnergyWise will be able to select an approved contractor to complete their 18 air sealing and insulation work. 19 The program will provide an incentive covering up to 20% of the cost of installing weatherization measures in residential heating customers' homes. The maximum incentive offered through this program is \$750 per gas heating account. Measures eligible

20 21 22 23 for an incentive through the program include: attic insulation, wall insulation, basement/crawl space insulation, rim joist insulation, duct insulation, heating system pipe 24

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insulation, attic ventilation (only in conjunction with attic insulation), ductwork leakage testing, ductwork leakage sealing, air infiltration testing and air infiltration sealing. Other measures may be added to the program menu, upon demonstration of cost-effectiveness.

To be eligible for an incentive, a National Grid pre-qualified contractor must be chosen to install program measures. Contractors wishing to become pre-qualified must provide proof of insurance in amounts and coverage acceptable to National Grid. National Grid will perform a background check to verify the contractor's good standing, and to determine if there have been complaints or other issues that would render the contractor ineligible.

Additionally, the contractor must meet other requirements that will be introduced over the course of 2007 and 2008. This will include certification or accreditation by the Building Performance Institute (BPI). BPI credentialed companies are trained to take into account the complex interactions that affect health, safety, comfort, energy performance, and the durability of homes. BPI standards include comprehensive diagnostic testing, measurement and verification that the work is completed properly, and quality assurance. The Company will reach out to the contractor community to provide training and assistance in purchasing diagnostic equipment. Additional quality control will be required as contractors begin working with the program.

It will be the responsibility of the installation contactor to complete and submit all incentive applications with proper supporting documentation. Do-it-yourself work will not be permitted through the program. Work completed through the program must meet all applicable state and local code requirements. It is anticipated that all measures installed will meet ENERGY STAR® guidelines, where applicable.

For multifamily buildings, the comprehensive building analysis will continue to be performed under the existing electric-funded Energy *Wise* program. The gas funds will be used to provide funding for prescriptive gas weatherization measures including insulation, showerheads, aerators, air sealing, duct insulation and duct sealing. The program will provide an incentive covering up to 20% of the cost of installing these

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measures. The program will target both public housing authorities and privately-owned 1 properties. Through the program, multifamily properties will receive either a 2 prescriptive or custom audit depending on the size of the property or complexity of the 3 project. Incentives described in the Residential High-Efficiency Heating and the 4 Residential High-Efficiency Water Heating Program descriptions will apply to 5 multifamily facilities and condominiums which contain gas heating systems and/or 6 domestic hot water systems that serve individual dwelling units. This type of facility 7 would also be eligible for the single family type GasNetworks incentive programs. 8 9 Incentive levels for these prescriptive measures may vary for income qualified facilities. Facilities with central heating plants and domestic hot water systems that are 10 interested in gas savings measures will be served through the Commercial High-11 Efficiency Heating and Commercial Energy Efficiency Programs. 12 13

The Company plans to promote the Energy *Wise* program through advertising, including bill inserts, direct mail, and the National Grid website. Customers interested in learning more about the program may call a toll-free number where they can also learn about all of the Company's residential energy efficiency programs.

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ENERGY ANALYSIS: INTERNET AUDIT PROGRAM

The Home Energy Analyzer program offers the Company's customers an online option for a home energy assessment. This audit tool provides customers with detailed recommendations for saving energy in their homes, all within the convenience of a web browser they can monitor whenever they choose. The tool can be accessed either through the National Grid website or through a dedicated URL. A Spanish version will also be available and a Portuguese version will be explored. The program also provides marketing and screening support for the other energy efficiency programs, by helping to determine which programs and services would be most valuable to the customer.

The service starts with 12 basic questions about the home and its occupants.

Using this information, the tool provides customers with a report comparing their home

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- with similar homes and offering "Top Ways to Save" that are specific to the customer's
- 2 home. Information will be provided about any applicable energy efficiency programs for
- this customer both gas and electric. Users are invited to sign up for the Company's
- 4 seasonal *e-fficiency news* electronic newsletter which includes seasonal tips to save
- 5 energy, information about the Company's other energy efficiency programs including
- 6 how to sign-up for those programs, and a link to continue the analysis of their homes.
- 7 The continued analysis consists of more in-depth questions about the numbers and types
- 8 of appliances, the current state of the home's weatherization and mechanical equipment,
- 9 and provides additional advice on how to improve the energy efficiency and comfort of
- the home.
 - The Company plans to promote the on-line home analyzer through advertising, bill inserts, email broadcasts, direct mail and the corporate website.

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RESIDENTIAL HIGH-EFFICIENCY HEATING PROGRAM

- The Company's Residential High-Efficiency Heating program will be jointly operated with GasNetworks and is available to the Company's residential heating customers. Program goals include, but are not limited to:
 - Increasing market sector awareness of high-efficiency gas heating equipment
- Increasing market sector awareness of efficiency enhancements and maintenance to gas heating equipment
- Providing product training and program training to trade allies such as plumbing and heating contractors
 - Increasing customer knowledge of where to obtain high-efficiency heating products
 - Examining new or underutilized energy efficient heating technologies for potential residential program development
- Monitoring customer perception of the performance and reliability of highefficiency gas heating equipment and the savings achieved.

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The program will be promoted through a variety of means including, but not limited to, direct mail campaigns, bill inserts, trade ally events, and contractor job site visits. Program brochures, builder packets and incentive applications will be the primary marketing material utilized. The program will be promoted through the National Grid and GasNetworks websites, where consumers and contractors will have the opportunity to download program incentive applications and learn about program announcements, updates or changes.

Overall, a strong emphasis will be placed on working with builders and contractors who install gas-heating equipment. Target markets for the program include both new construction and retrofit projects. The retrofit market is seen as the primary driver of high-efficiency forced hot water and steam heating system opportunities, whereas the new construction market is seen as the primary driver for high-efficiency furnaces.

The incentive is available to residential heating customers (builders and/or homeowners) worth up to \$800, depending on the type of heating equipment installed. This incentive level is in accordance with the GasNetworks incentive levels offered throughout New Hampshire, Maine, and Massachusetts. Subject to cost-effectiveness, other heating related measures will also be incorporated in the incentive portfolio. The incentive encourages customers to choose a high-efficiency model by influencing a consumer in two ways: bringing attention and perceived value to the high-efficiency equipment as an option as well as offsetting a portion of the higher initial purchase cost of a high-efficiency model compared to a standard-efficiency model. On September 1st of each year, GasNetworks typically makes changes to the incentive levels of the High-Efficiency Heating Program in conjunction with the members of the GasNetworks collaborative. National Grid proposes to adopt this practice. Factors taken into account include market penetration information, changes in incremental costs of high-efficiency equipment, and current program year participation and budget levels. See Table 1 for a listing of eligible equipment under the program and the current incentive level.

Table 1 Residential High-Efficiency Heating Program: Incentive Table		
Furnaces (forced hot air)	AFUE* 90% or greater	\$100 Incentive
Furnaces (forced hot air with ECM or equivalent)	AFUE* 92% or greater	\$400 ³ Incentive
Boilers (forced hot water)	AFUE* 85% or greater	\$500 Incentive
Boilers (forced hot water)	AFUE* 90% or greater	\$800 Incentive
Boilers (steam with electronic ignition)	AFUE* 82% or greater	\$200 Incentive

* AFUE = Annual Fuel Utilization Efficiency

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RESIDENTIAL HIGH-EFFICIENCY WATER HEATING PROGRAM

The Company's Residential High-Efficiency Water Heating program will be jointly operated with GasNetworks and will be available to the Company's residential water heating customers. Similar to the Company's Residential High-Efficiency Heating program, program goals include, but are not limited to:

- Increasing the demand for residential high-efficiency natural gas water heaters.
- Increasing customer and trade ally awareness of the benefits of high-efficiency natural gas water heaters.
- Providing training on products and programs to trade allies such as plumbing and heating contractors.
- Increasing customer knowledge of where to obtain high-efficiency water heating products.
- Monitoring customer perception of the performance and reliability of highefficiency gas water heating equipment and the savings achieved.

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³ \$200 of this incentive will be funded through the electric energy efficiency program approved by the Commission.

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Program marketing will consist of direct mail campaigns and outreach to contractors, builders, affordable housing developers, community development corporations, and public housing authorities, bill inserts to residential customers, attendance at trade ally training events, radio, and promotion via National Grid's and GasNetwork's websites. While direct customer marketing will generate a portion of the leads for this program, a significant emphasis will be placed on meeting with heating and plumbing contractors at trade shows, training sessions and job sites to encourage contractors to influence consumer purchasing behavior toward this type of product.

The program incentive will be \$300 to residential water heating customers who install an indirect water heater to an ENERGY STAR® rated natural gas forced hot water boiler.

The Company will provide incentives for on-demand tankless water heaters as an energy saving alternative to the stand alone water heaters. The Company will provide

The Company will provide incentives for on-demand tankless water heaters as an energy saving alternative to the stand alone water heaters. The Company will provide a \$300 incentive for on-demand, tankless water heaters that have a 0.82 Energy Factor with an electronic ignition. The Company proposes to promote both types of technology and will work with the contractor community to assist it on how to identify the most appropriate application to reap the most energy savings.

The Company also plans to participate in a developing water heater initiative sponsored by the California Energy Commission. This developing initiative, The Super Efficient Gas Water Heating Appliance Initiative (SEGWHAI), is intended to speed the introduction of tank-type water heaters that are 15-30% more efficient than standard models. Water heating represents approximately 16% of a household's natural gas usage. Tank-type water heaters represent over 80% of water heater stock in the northeast. Currently, an efficient water heater of this nature does not exist. Introduction of such models as a result of the SEGWHAI project would enable to Company to develop an incentive program in the future to promote that technology in customer's homes.

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ENERGY STAR® PROGRAMMABLE THERMOSTAT PROGRAM

The ENERGY STAR Programmable Thermostat program provides a GasNetworks incentive for the purchase and installation of up to two ENERGY STAR labeled programmable thermostats per household. According to ENERGY STAR, programmable thermostats are more accurate than manual models, contain no mercury, save energy, and are, therefore, better for the environment. Over 250 different thermostat models currently meet ENERGY STAR guidelines – up from only 60 five years ago. Each ENERGY STAR qualified model thermostat includes four default program periods per day, as well as a two-degree accuracy to keep home temperatures more even.

The ENERGY STAR Programmable Thermostat program will provide home heating customers with an incentive for the purchase and installation of ENERGY STAR labeled programmable thermostats. Through this program, customers will be eligible for

labeled programmable thermostats. Through this program, customers will be eligible for a \$25 mail-in incentive for the installation of up to two ENERGY STAR qualified programmable thermostats. When applying for a thermostat incentive, residential customers will be required to submit proof-of-purchase for the unit. The ENERGY STAR website lists and updates all eligible thermostat models. Eligible thermostats may be installed by homeowners, heating contractors or energy auditors. In addition to mail-in incentives, instant incentives, in the form of point-of-sale discounts, will be available through heating contractors and energy auditors.

Earning the ENERGY STAR means products meet strict energy efficiency guidelines set by the US Environmental Protection Agency (EPA) and the Department of Energy (DOE). To be ENERGY STAR labeled, programmable thermostats must be equipped with the following features:

- Stores four or more temperature settings a day
- Adjusts heating or air conditioning turn-on times as the outside temperature changes
- Saves and repeats multiple daily settings
- A "hold" feature that temporarily overrides programmed settings

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The Company will promote this program via its website, both its thermostat and heating incentive forms, direct mail, bill inserts, the online Home Energy Analyzer, e-fficiency news electronic newsletters and through Energy Wise program auditors. The Company will do outreach to stores such as The Home Depot[®], Lowe's[®], and regional hardware stores. The retailer outreach effort will provide training of these retailers' sales personnel regarding the incentive program and coordinate the ongoing distribution of program incentive forms at these stores. The retailer outreach will be coordinated with that of the ENERGY STAR Lighting and Appliance Programs.

NEW CONSTRUCTION AND ENERGY STAR® HOMES PROGRAM

The ENERGY STAR Homes program is part of a national energy efficiency campaign first developed in 1998 by the EPA and DOE. Rhode Island was one of the first states to adopt this program, funded by electric energy efficiency funds. The homes are designed, site inspected, and performance-tested to achieve a home energy rating which helps consumers differentiate between efficient homes and standard homes.

The current program offered by National Grid and funded through the electric DSM charge provides services to all residential new construction, regardless of fuel type. National Grid will continue the existing program and examine opportunities to realign the funding mechanisms for 2008 now that gas funding is available. For 2007 and 2008, the Company proposes to include a small budget funded by gas funds to support contractor training and education.

SINGLE FAMILY LOW INCOME SERVICES

The Residential Low Income Program offers weatherization services to income qualified customers eligible for fuel assistance benefits, who live in 1-4 unit buildings. As had previously been the case with New England Gas in Rhode Island, the Company will contract with the Rhode Island Office of Energy Resources (OER) and local weatherization agencies for the delivery of energy efficiency services to eligible

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customers. This is the same program model of serving low income customers currently employed by National Grid for its electric efficiency programs.

Eligible measures provided through the program will include an energy audit, attic insulation, wall insulation, air sealing, heating system replacement (on a qualifying basis) safety inspections, low-flow showerheads and aerators, and funding the installation of CO detectors when DOE funds are not available.

The Company will market the program via Company brochures, bill inserts, and the National Grid website. The program may also be marketed through direct contact with eligible customers by OER and local CAP agencies to customers it serves through state, federal, or local low income programs.

BUILDING PRACTICES AND DEMONSTRATION PROGRAM

The Company plans to launch its Building Practices and Demonstration Program for residential markets during Program Year One. The purpose of the Building Practices and Demonstration Program will be to explore and demonstrate new and/or underutilized energy efficient procedures and equipment, including renewable energy system processes. In its first year, the Building Practices and Demonstration Program will work to identify which technologies or home building techniques would be well suited for use and installation.

Input for this new program will be drawn from the expertise gathered by the Company's Commercial & Industrial Building Practices & Demonstration Program, as well as input from other utilities, program vendors, energy groups and interested business partners.

Eligible participants in this program will include homeowners, landlords, as well as home builders. Each participant may be asked to allow monitoring of the installation and/or results, provide historical data, provide tours of the installation by potential users or other interested stakeholders, and share the results in case study format.

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1 Examples of potential projects include new insulation and weatherization products, advanced heating and water heating products, solar thermal installations, new 2 construction techniques, green homes or very low energy use homes. Specific projects 3 will depend on interest and participation by customers, builders, vendors and 4 manufacturers. 5 Marketing of the program will rely on working with industry vendors developing 6 7 and/or offering new or underutilized natural gas energy efficiency technologies, as well 8 as other interested organizations.

Commercial and Industrial Programs for 2007 and 2008

- 2 A brief description of each proposed program for commercial and
- 3 industrial customers is provided in the following table:

Proposed Commercial and Industrial Energy Efficiency Programs		
Business Energy Analyzer	Free online energy analysis service that makes customized energy efficiency recommendations based on a commercial customer's energy consumption profile.	
Energy Audit and Engineering Services	No- cost company-provided energy auditing service to help customers evaluate energy efficiency improvements in their facilities or 50% matching funds up to \$10,000 for outside studies that evaluate more complex technologies under consideration for implementation in customer facilities.	
Commercial Energy Efficiency Program	Co-funding for Energy Auditing or Engineering Services; Prescriptive and custom incentives for more sophisticated systems and controls up to \$100,000, up to \$150,000 for eligible CHP projects.	
Commercial High Efficiency Heating Program	Incentives up to \$6,000 for high-efficiency furnaces (90% AFUE), high efficiency furnaces (92% AFUE with ECM or equivalent), boilers (85% thermal efficiency) or steam boilers (82% thermal efficiency). Incentives up to \$300 for qualified efficient water heating measures.	
Economic Redevelopment Program	Matching grants up to \$100,000 for energy saving measures in commercial properties in designated Economic Redevelopment areas.	
The Emerald Network	Incentives and services to customers focused on developing new green buildings (new construction) or increasing green aspects of existing buildings.	
Building Practices & Demonstration Program	Participate in funding for demonstration projects that apply to new or underutilized technologies.	
Trade Ally Training Program	Energy management training sessions targeted to individuals responsible for the maintenance and operation of equipment and systems in commercial buildings, industrial plants, and public facilities. Provide information and training on energy efficiency issues to plumbing & heating contractors, builders, architects, engineers, realtors, appraisers and others.	

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Business Energy Analyzer

The Business Energy Analyzer is an on-line self-managed audit tool that provides customers with customized and practical recommendations for saving energy all from the convenience of their computer. It is a user-friendly tool developed by Nexus Energy Software that provides business customers: (1) an opportunity to learn about energy savings as it relates both to their facility and their industry; (2) the flexibility of addressing energy concerns at their leisure; and (3) the ability to return to the site and review the recommendations. The tool also provides customers a vehicle to identify which energy saving incentives they may be eligible for from National Grid.

Customers complete a Level I profile that includes their location, business type, size of facility and hours of operation. Based on this information the system generates energy saving recommendations or "Ways to Save". At this point, the customer can opt to move on to Level II and enter more specific information about their facility. This information includes actual energy use from utility bills, or they can choose to have the system estimate usage. Based on the additional information, the system generates an analysis of the business's energy usage that provides more accurate energy saving suggestions and targeted "Ways to Save". The customer can view these tips either by showing those with the greatest savings or the shortest payback. The recommended measures have been customized to reflect information on incentives from National Grid. Customers can also create a plan for energy efficiency from these measures that can be retrieved any time they log on. Additionally, the tool offers the customer the ability to compare their energy usage to similar businesses and view industry specific case studies.

The Company will market the tool through direct mail campaigns and promotions designed to increase awareness and usage of the tool. Additionally, the tool will be marketed through the Company's sales force and energy efficiency staff members that have contact with customers, through partnerships with trade organizations and at trade shows.

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Energy Audit and Engineering Services

Energy Auditing services are for customers intending to proceed with energy efficiency improvements but who require assistance estimating savings and incentive levels. Most participants in this category will be small to medium customers with energy efficiency applications, or large customers with relatively simple energy efficiency projects. It is not required for customers to obtain an energy audit before proceeding with prescriptive energy efficiency measures, nor does the Company intend to provide Energy Auditing services for such projects. This service is provided with no direct cost to the customer.

Engineering services will be used to evaluate more complex projects that involve technologies associated with mechanical equipment, process equipment, and/or underutilized or emerging green technologies. These types of technologies may include boiler or chiller plant redesigns, heat recovery systems, digital energy management systems, process efficiency improvement projects, and associated green building technologies. Services provided under the program will include technical analysis and engineering support for medium to large customers who need assistance evaluating and/or designing complex projects. The Company will cost share these services with the customer up to 50% of the reasonable fees related to the efficiency project, not to exceed \$10,000. An administrative vendor will be capable of providing Engineering services to the customer under contract with the Company at negotiated rates to be established via a competitive bid process. In order to maintain a high level of quality and cost-effectiveness throughout the program, the following criteria will be required:

- The study must be conducted by a Professional Engineer (PE) and/or a Certified Energy Manager (CEM);
- The study scope and depth must extend beyond what is offered within the Energy Auditing program;

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 The customer will be required to pursue a green building/facility certification or to seek assistance with a specific energy efficient technology.

Commercial Energy Efficiency Program

The Commercial Energy Efficiency Program is designed to provide support services and financial incentives that encourage the Company's commercial and industrial customers to install energy efficient natural gas equipment. Virtually any energy efficient technology or system design that exceeds the minimum requirements of the local energy code, and which is not covered by another Company program offering, may be eligible for a incentive under this program. The program will be open to all gas sales customers on a commercial tariff, including multifamily facilities. Incentives provided through the program must be pre-approved by the Company and/or the administrative vendor prior to delivery or installation of product(s) or service(s).

Customers may apply for program services or incentives via a variety of channels including Company representatives, plumbing and heating contractors, engineering firms, energy service companies or equipment vendors. After reviewing the customer's energy efficiency needs, the customer will be offered the appropriate program services. The following describes the three categories of services a customer may be eligible for.

Prescriptive Incentives

Prescriptive incentives will be available for common energy efficiency measures including programmable thermostats, boiler reset controls, steam trap replacements, pipe and/or duct insulation, building shell (walls, roof, floor, crawlspace) insulation, and high efficiency windows. Prescriptive incentives will be targeted toward all commercial and industrial customers. The Company will rely primarily upon contractors and trade allies to locate candidate facilities and to install the eligible prescriptive measures. This effort will be supported by an extensive outreach and education effort to these trade allies, as well as promotions directed to the customers themselves. Energy audits will not be required for participation. However, pre-approval of the contractor's proposals and the

- available prescriptive incentive will be required. Customers will receive incentives for
- 2 installed measures as indicated in Table 1.

Table 1 Eligible Prescriptive Measures							
Measure	Proposed Incentive						
Programmable thermostats	\$25 each						
Digital boiler reset control	\$150 single stage; \$250 multi-stage						
Steam trap replacements	\$25 / replaced trap						
Pipe or duct insulation; duct sealing	Up to 20% of project cost						
Building shell insulation (roof, walls,	Up to 20% of project cost						
floor)	Op to 20% of project cost						
Premium efficiency windows	\$1 / sq.ft. of window rough opening area						
Gas Fired High Efficiency Fryers	\$300 / \$500 incentives						

Custom Incentives

Custom Incentives will be available for projects that demonstrate the use of natural gas more efficiently than typical industry practices, or more efficiently than the minimum building code requirements. Incentives will be limited to no more than 50% of the eligible installed project costs, and the Company's contribution will be capped at \$100,000 per site and/or project, and up to \$150,000 per eligible CHP project.

Custom Incentives will be classified as either Level One or Level Two. Level One projects will involve less complex technologies and/or highly cost effective technologies and will receive incentives based upon \$0.75 per first year of estimated therm savings. Examples of Level One projects are redesigns of HVAC systems, energy recovery ventilation, most heat recovery applications, building automation/energy management systems, and advanced technology burners and/or burner controls.

Level Two projects are more complex and/or represent underutilized technologies and will receive incentives based upon \$1.50 per first year of estimated therm savings. Few applications are expected to reach this threshold. In Program Year 1 the Company will build upon its experiences in other jurisdictions and offer customers the opportunity

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- to incorporate solar thermal technologies such as solar DHW heating, solar pool heating,
- 2 and solar space heating into the program. Incentives may not be applied toward normal
- maintenance costs, or for equipment disabling or abandonment without an energy
- 4 efficient replacement.

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- The Company recognizes the need to promote cost effective gas fired cogeneration systems, also called combined heat and power (CHP) where the heat byproduct of a gas reciprocating engine or gas turbine can be used to supplement a process
- 8 heat load in an industrial or institutional facility and also provides electric energy.
 - The Company will offer a modified custom incentive for eligible CHP installations. Under this application, CHP systems will receive incentives based upon \$0.75 per first year of estimated therm savings with a project cap of \$100,000. Higher efficiency CHP systems, will receive an incentive of \$1.50 per first year of estimated therm savings with a project cap of \$150,000. The Parties will determine eligibility criteria for CHP projects. The intent is to offer higher incentives for more efficient systems.

Commercial High-Efficiency Heating Program

The Commercial High-Efficiency Heating program will provide incentives to commercial, industrial, governmental, institutional, non-profit and multifamily facilities that install high-efficiency heating equipment. The incentives will be provided to reduce the incremental cost between standard and high-efficiency equipment.

The Commercial High-Efficiency Heating program will be promoted primarily to architects, engineers, equipment vendors, contractors and other trade allies. Since many of the trade allies overlap in the residential and smaller multifamily and commercial markets, the program will often be promoted together with the Residential High-Efficiency Heating program. Trade ally awareness will be increased through direct mail, trade publications, newspapers, trade shows/seminars, and site visits.

The program's incentive schedule will apply to a variety of product types and a broad range of equipment sizes that are appropriate for the commercial market segments.

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- This range provides an opportunity to participate regardless of customer size. There will
- 2 also be incentives for natural gas fired, low intensity infrared heaters, high efficiency
- 3 condensing unit heaters and direct fired make-up air systems that are appropriate for the
- 4 larger commercial and industrial segments. Boiler incentives will be available in a two-
- 5 tiered matrix: Tier One for high-efficiency non-condensing boilers and Tier Two for
- 6 high-efficiency fully condensing boilers.
- 7 The Commercial High-Efficiency Heating Incentive Program efficiency ratings
- 8 for smaller heating equipment (up to 300,000 Btuh input) are measured using AFUE
- 9 ratings. Efficiency ratings for larger heating equipment, which exceeds the size ranges
- for AFUE, are measured using a thermal efficiency or steady state rating.

Table 2. below depicts the Commercial High-Efficiency Heating program incentive qualifications.

Table 2. Commercial High-Efficiency Heating Program Incentive Qualification								
Product	Rating	Incentive						
Furnaces (up to 150 MBtuh)	> 90% AFUE	\$150						
Furnaces	>92% AFUE with ECM or equivalent	\$400¹						
Rooftop Furnaces with Modulating Burners added	Not Applicable	Custom						
Condensing unit heaters (151 to 400 MBtuh)	> 90% Thermal Efficiency	\$500						
Direct fired heaters / direct fired makeup air (up to 1500 MBtuh)		\$1,000						
Direct fired heaters / direct fired makeup air (1501 to 3000 MBtuh)		\$1,500						
Direct fired heaters / direct fired makeup air (over 3000 MBtuh)		\$2,000						
Infrared heaters (all sizes)	low intensity	\$500						
Steam Boilers (up to 300 MBtuh)	> 82% AFUE	\$200						
Steam Boilers (over 300 MBtuh) with Modulating Burners added	Not Applicable	Custom						
Hydronic Boilers (under 175 MBtuh)	> 85% AFUE	\$500						
Hydronic Boilers (176 to 300 MBtuh)	> 85% AFUE	\$700						
Hydronic Boilers (301 to 499 MBtuh)	> 85% Thermal Efficiency	\$1,000						
Hydronic Boilers (500 to 999 MBtuh)	> 85% Thermal Efficiency	\$2,000						
Hydronic Boilers (1000 to 1700 MBtuh)	> 85% Thermal Efficiency	\$3,000						
Hydronic Boilers (1701 MBtuh and larger)	> 85% Thermal Efficiency	\$4,000						
Condensing Boilers (under 175 MBtuh)	> 88% AFUE	\$600						
Condensing Boilers (176 to 300 MBtuh)	> 88% AFUE	\$1,000						
Condensing Boilers (301 to 499 MBtuh)	> 90% Thermal Efficiency	\$1,500						
Condensing Boilers (500 to 999 MBtuh)	> 90% Thermal Efficiency	\$3,000						
Condensing Boilers (1000 to 1700 MBtuh)	> 90% Thermal Efficiency	\$4,500						

¹ \$150 of this incentive will be funded through the electric energy efficiency program approved by the Commission.

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Condensing Boilers (1701 MBtuh and larger)>	90% Thermal Efficiency	\$6,000
Instantaneous Tankless Water Heater	>0.82 EF & Electronic	\$300
	Ignition	
Indirect fired water heaters (up to 50 gallon storage)		\$100
Indirect fired water heaters (over 50 gallon storage)		\$250

Economic Redevelopment Program

The Economic Redevelopment Program is designed to improve energy efficiency and reduce energy costs while also helping to foster the rehabilitation of buildings, storefronts and neighborhoods in areas that are in need. Additionally, the program can provide financial incentives and resources to help community based organizations and non-profits increase the energy efficiency of their facilities and reduce their operating costs. Through the program, the Company will work with Chambers of Commerce, economic redevelopment organizations, non-profit organizations, as well as private development corporations and businesses to facilitate the installation of eligible building shell and other measures that increase the energy efficiency of business districts, K-12 public school systems, and public and private subsidized housing. One of the program's objectives is to leverage energy efficiency funds with other investments that are being made for community development purposes.

Funding through the Economic Redevelopment Program will focus on projects that demonstrate a strong community impact. A project has a strong community impact when it provides for site rehabilitation, creates jobs, provides housing solutions or is integral in providing community based programs.

The program will be open to all Company multifamily, commercial and industrial customers that meet the program's intent. Maximum funding per project will be \$100,000, with a minimum of 50% matching funds requirement by customer.

Applications for funding must include a description of the redevelopment project, information on the sponsoring organization, identification of additional funding sources, types of energy conserving measures to be installed, estimated energy savings and project schedule. Each application for funding will be evaluated and an analysis will be

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- performed to identify cost-effective opportunities for reducing a customer's energy
- 2 usage. The analysis performed will lead to a report summary of recommendations and a
- detailed description of the alternatives evaluated, including: total installation costs,
- 4 annual energy costs, annual savings and simple payback periods.

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The Emerald Network

The Emerald Network will offer incentives and services to customers focused on developing new green buildings or increasing green aspects of their existing buildings. The program will provide both technical and financial resources to assist customers seeking Leadership Energy and Environmental Design (LEED®) Certification through the US Green Building Council's LEED rating system. These services will aid customers and their design teams in designing and constructing better buildings through high performance heating and building envelope systems. In addition to looking at traditional opportunities for energy efficiency, this track will also promote the use of advanced technologies, such as combined heating or cooling and power and double-effect absorption cooling, by connecting customers with resources from National Grid and industry partners. The Company will assist design teams through technical assessments and integrated engineering and architectural practices during the design development to define best practices toward high performance green standards. This effort will engage architects, engineers and other building and construction industry participants not traditionally reached through other energy efficiency programs, to move toward high performance, green practices. In addition, these services will include design features such as water resource management and advanced lighting systems. To fully support this program and ensure that green buildings are performing as designed, the Company will also provide training for operators of green buildings and increasing their awareness of green applications.

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Building Practices and Demonstration Program

The purpose of the Building Practices and Demonstration Program is to establish successful applications of new or underutilized energy efficient procedures, processes, or technologies. Interested parties may file applications for financial and technical assistance directly with the Company. Applications must include a description of the scope of work and an estimate of the savings and benefits to be realized. Participants are required to allow monitoring of the installation and/or results, tours of the installation by potential users or other interested stakeholders, and publication of the results in case study format.

To market the program, the Company will rely on industry vendors developing and/or offering new or underutilized natural gas energy efficiency technologies as well as the efforts of Company employees.

The focus will be technologies that have low customer awareness or market penetration, and the end uses may include cooling, refrigeration, process heat, cooking, thermal measures, cogeneration, load control, or heat recovery. The program may also look at exemplary energy efficient designs or practices as demonstrations.

During the first year, the Company will be working to identify new energy efficient kitchen technologies. Some of these technologies include:

- Commercial Steam Cookers
- 20 Infrared Pizza Ovens
- 21 Internet Protocol Based Remote Energy Management Systems
- **Solution** Low-flow Commercial Dishwashers

The Company will develop relationships with key partners and organizations like the Consortium for Energy Efficiency (CEE) Commercial Kitchens Group and the Energy Solutions Center (ESC), to increase its access to new technology information.

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Trade Ally Training Program

Energy efficiency awareness by the Company's trade allies is crucial to reducing barriers to energy efficiency and increasing acceptance of new technologies. Education activities to this segment will be a critical piece of the Company's promotion efforts.

The Company will support and undertake a wide range of training events in collaboration with GasNetworks², the ENERGY STAR® Homes Joint Management Committee, Northeast Energy Efficiency Partnerships (NEEP), manufacturing training representatives and other trade allies. Outreach will extend to contractors, engineers, builders, landlords, realtors, facility managers and housing authorities. In addition, the Company will also support NEEP's Building Operator Certification Initiative. The objective of all training activities will be to increase trade ally awareness of the benefits of energy efficiency and provide them with the technical tools to properly select, size, install and maintain energy efficient products.

Training activities will be promoted via Company newsletters and direct mail campaigns to contractors, in addition to meeting with trade allies at public events. The GasNetworks website (www.gasnetworks.com) will also be used as a vehicle for promotion, offering trade allies a central source of information on special event training efforts, in addition to joint energy efficiency programs.

The budget for the Trade Ally Training Program will be included within each program's budget.

an Energy Efficient Economy as exemplary examples of natural gas energy efficiency programs.

² GasNetworks is a regional collaborative of natural gas distribution companies that coordinate natural gas energy efficiency programs throughout Maine, Massachusetts and New Hampshire. The benefit of GasNetworks membership is that it allows each participating company to offer regional programs at a lower overall cost to its customers. The GasNetworks programs are consistent wherever they have been offered. The GasNetworks programs have received several national awards from the American Council for

				(\$0.0114	per merm)				
Resident	tial Heating:	_					Difference du	ue to:	
Cons	Jul - Jun sumption (Therms)	Proposed July-07	Current Rates	Difference	% Chg	Base Rates	GCR	DAC	DSM
00	, , , , , , , , , , , , , , , , , , ,				, o o g				
	518	\$872	\$869	\$3	0.3%	\$0	\$0	\$0	\$3
	621	\$1,024	\$1,021	\$3	0.3%	\$0	\$0	\$0	\$3
	725	\$1,176	\$1,173	\$4	0.3%	\$0	\$0	\$0	\$4
	828	\$1,326	\$1,322	\$4	0.3%	\$0	\$0	\$0	\$4
	932	\$1,474	\$1,469	\$5	0.3%	\$0	\$0	\$0	\$5
Typic	al 1,035	\$1,621	\$1,615	\$ 5	0.3%	\$0	\$0	\$0	\$5
	1,139	\$1,768	\$1,762	\$6	0.3%	\$0	\$0	\$0	\$6
	1,242	\$1,913	\$1,907	\$6	0.3%	\$0	\$0	\$0	\$6
	1,346	\$2,058	\$2,052	\$7	0.3%	\$0	\$0	\$0	\$7
	1,449	\$2,203	\$2,196	\$7	0.3%	\$0	\$0	\$0	\$7
	1,553	\$2,349	\$2,341	\$8	0.3%	\$0	\$0	\$0	\$8
Posidoni	tial Non-Heating:								
Resident	nai Non-Heating.						Difference du	ue to:	
	Jul - Jun	Proposed	Current						
Cons	sumption (Therms)	July-07	Rates	Difference	% Chg	Base Rates	GCR	DAC	DSM
	77	\$208	\$207	\$0	0.2%	\$0	\$0	\$0	\$0
	92	\$231	\$231	\$1	0.2%	\$0	\$0	\$0	\$1
	107	\$255	\$254	\$1	0.2%	\$0	\$0	\$0	\$1
	122	\$278	\$278	\$1	0.2%	\$0	\$0	\$0	\$1
	138	\$302	\$301	\$1	0.2%	\$0	\$0	\$0	\$1
Typic	cal 153	\$325	\$325	\$1	0.2%	\$0	\$0	\$0	\$1
	168	\$349	\$348	\$1	0.2%	\$0	\$0	\$0	\$1
	184	\$373	\$372	\$1	0.2%	\$0	\$0	\$0	\$1
	199	\$396	\$395	\$1	0.3%	\$0	\$0	\$0	\$1
	214	\$420	\$419	\$1	0.3%	\$0	\$0	\$0	\$1
	230	\$443	\$442	\$1	0.3%	\$0	\$0	\$0	\$1

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Consumption	Jul - Jun on (Therms)	Proposed July-07	Current Rates	Difference	% Chg	Base Rates	GCR	DAC	DSM
	621	\$1,090	\$1,087	\$3	0.3%	\$ 0	\$0	\$0	\$3
	745	\$1,271	\$1,267	\$4	0.3%	\$0	\$0	\$0	\$4
	869	\$1,450	\$1,446	\$4	0.3%	\$0	\$0	\$0	\$4
	994	\$1,626	\$1,621	\$5	0.3%	\$0	\$0	\$0	\$5
	1,118	\$1,801	\$1,795	\$6	0.3%	\$0	\$0	\$0	\$6
Typical	1,242	\$1,974	\$1,968	\$6	0.3%	\$0	\$0	\$0	\$6
	1,366	\$2,147	\$2,140	\$7	0.3%	\$0	\$0	\$0	\$7
	1,490	\$2,318	\$2,311	\$8	0.3%	\$0	\$0	\$0	\$8
	1,615	\$2,490	\$2,482	\$8	0.3%	\$0	\$0	\$0	\$8
	1,739	\$2,662	\$2,653	\$9	0.3%	\$0	\$0	\$0	\$9
	1,863	\$2,834	\$2,824	\$10	0.3%	\$0	\$0	\$0	\$10
& I Medium:	Jul - Jun	Proposed	Current				Difference d	ue to:	
Consumption	on (Therms)	July-07	Rates	Difference	% Chg	Base Rates	GCR	DAC	DSM
	5,174	\$7,485	\$7,458	\$26	0.4%	\$O	\$0	\$0	\$26
	6,209	\$8,873	\$8,842	\$32	0.4%	\$0	\$0	\$0	\$32
	7,244	\$10,262	\$10,225	\$37	0.4%	\$0	\$0	\$0	\$37
	8,278	\$11,651	\$11,609	\$42	0.4%	\$0	\$0	\$0	\$42
	9,313	\$13,040	\$12,993	\$47	0.4%	\$0	\$0	\$0	\$47
Typical	10,348	\$14,429	\$14,376	\$53	0.4%	\$0	\$0	\$0	\$53
	11,383	\$15,818	\$15,760	\$58	0.4%	\$0	\$0	\$0	\$58
	12,418	\$17,207	\$17,143	\$63	0.4%	\$0	\$0	\$0	\$63
	13,452	\$18,596	\$18,527	\$69	0.4%	\$0	\$0	\$0	\$69
	14,487	\$19,985	\$19,911	\$74	0.4%	\$0	\$0	\$0	\$74
	15,522	\$21,374	\$21,294	\$79	0.4%	\$0	\$0	\$0	\$79

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Consumpt	Jul - Jun ion (Therms)	Proposed July-07	Current Rates	Difference	% Chg	Base Rates	GCR	DAC	DSM
	33,637	\$46,700	\$46,528	\$172	0.4%	\$0	\$0	\$0	\$172
	40,364	\$55,824	\$55,618	\$206	0.4%	\$0	\$0	\$0	\$206
	47,092	\$64,948	\$64,708	\$240	0.4%	\$0	\$0	\$0	\$240
	53,819	\$74,072	\$73,797	\$274	0.4%	\$0	\$0	\$0	\$274
	60,547	\$83,196	\$82,887	\$309	0.4%	\$0	\$0	\$0	\$309
Typical	67,274	\$92,320	\$91,977	\$343	0.4%	\$0	\$0	\$0	\$343
. , p	74,001	\$101,444	\$101,066	\$377	0.4%	\$0	\$0	\$0	\$377
	80,729	\$110,568	\$110,156	\$412	0.4%	\$0	\$0	\$0	\$412
	87,456	\$119,692	\$119,246	\$446	0.4%	\$0	\$0	\$0	\$446
	94,184	\$128,816	\$128,335	\$480	0.4%	\$0	\$0	\$0	\$480
	100,911	\$137,939	\$137,425	\$515	0.4%	\$0	\$0	\$0	\$515
C & I HLF Larg	ge: Jul - Jun	Proposed	Current				Difference du	ue to:	
Consumpt	ion (Therms)	July-07	Rates	Difference	% Chg	Base Rates	GCR	DAC	DSM
	33,638	\$42,594	\$42,423	\$172	0.4%	\$ 0	\$0	\$0	\$172
	40,365	\$50,897	\$50,691	\$206	0.4%	\$0	\$0	\$0	\$206
	47,093	\$59,200	\$58,960	\$240	0.4%	\$0	\$0	\$0	\$240
	53,820	\$67,503	\$67,228	\$274	0.4%	\$0	\$0	\$0	\$274
	60,548	\$75,806	\$75,497	\$309	0.4%	\$0	\$0	\$0	\$309
Typical	67,275	\$84,109	\$83,765	\$343	0.4%	\$0	\$0	\$0	\$343
71	74,003	\$92,411	\$92,034	\$377	0.4%	\$ 0	\$ 0	\$0	\$377
	80,730	\$100,714	\$100,303	\$412	0.4%	\$0	\$0	\$0	\$412
	87,458	\$109,017	\$108,571	\$446	0.4%	\$0	\$0	\$0	\$446
	94,185	\$117,320	\$116,840	\$480	0.4%	\$0	\$0	\$0	\$480
	100,913	\$125,623	\$125,108	\$515	0.4%	\$0	\$0	\$0	\$515

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Consumpt	Jul - Jun ion (Therms)	Proposed July-07	Current Rates	Difference	% Chg	Base Rates	GCR	DAC	DSM
	142,312	\$176,057	\$175,331	\$726	0.4%	\$ 0	\$0	\$0	\$726
	170,774	\$210,548	\$209,677	\$871	0.4%	\$0	\$0	\$0	\$871
	199,237	\$245,040	\$244,024	\$1,016	0.4%	\$0	\$0	\$0	\$1,016
	227,699	\$279,531	\$278,370	\$1,161	0.4%	\$0	\$0	\$0	\$1,161
	256,162	\$314,023	\$312,716	\$1,306	0.4%	\$0	\$0	\$0	\$1,306
Typical	284,624	\$348,514	\$347,062	\$1,452	0.4%	\$0	\$0	\$0	\$1,452
	313,086	\$383,005	\$381,409	\$1,597	0.4%	\$0	\$0	\$0	\$1,597
	341,549	\$417,497	\$415,755	\$1,742	0.4%	\$0	\$0	\$0	\$1,742
	370,011	\$451,988	\$450,101	\$1,887	0.4%	\$0	\$0	\$0	\$1,887
	398,474	\$486,480	\$484,447	\$2,032	0.4%	\$0	\$0	\$0	\$2,032
	426,936	\$520,971	\$518,794	\$2,177	0.4%	\$0	\$0	\$0	\$2,177
C & I HLF Ext	ra-Large:						Difference du	ue to:	
	Jul - Jun	Proposed	Current						
Consumpt	ion (Therms)	July-07 	Rates	Difference	% Chg	Base Rates	GCR	DAC	DSM
	137,313	\$161,353	\$160,653	\$700	0.4%	\$0	\$0	\$0	\$700
	164,775	\$192,904	\$192,063	\$840	0.4%	\$0	\$0	\$0	\$840
	192,238	\$224,454	\$223,474	\$980	0.4%	\$0	\$0	\$0	\$980
	219,700	\$256,005	\$254,884	\$1,120	0.4%	\$0	\$0	\$0	\$1,120
	247,163	\$287,555	\$286,295	\$1,261	0.4%	\$0	\$0	\$0	\$1,261
Typical	274,625	\$319,106	\$317,705	\$1,401	0.4%	\$0	\$0	\$0	\$1,401
	302,088	\$350,657	\$349,116	\$1,541	0.4%	\$0	\$0	\$0	\$1,541
	329,550	\$382,207	\$380,526	\$1,681	0.4%	\$0	\$0	\$0	\$1,681
	357,013	\$413,758	\$411,937	\$1,821	0.4%	\$0	\$0	\$0	\$1,821
	384,475	\$445,308	\$443,348	\$1,961	0.4%	\$0	\$0	\$0	\$1,961
	411,938	\$476,859	\$474,758	\$2,101	0.4%	\$0	\$0	\$0	\$2,101

Funding Sources by Sector 2007 and 2008

	Jan. 1, 2007 -	July 1, 2007 -			Total
	June 30, 2007	Dec. 31, 2007	Total 2007	2008	2007 - 2008
Gas Energy Efficiency Surcharge per Dth	\$0.063	\$0.111		\$0.111	
Uncollectible Percentage (Docket 3401)		2.1%		2.1%	
Adjusted Factor		\$0.114		\$0.114	
Forecasted Use (Dth):					
Total Firm THROUGHPUT					
Residential Non-Heating	358,597	258,997	617,594	600,953	1,218,547
Residential Heating	12,900,898	5,243,533	18,144,431	18,322,127	36,466,558
Residential Subtotal	13,259,494	5,502,530	18,762,025	18,923,080	37,685,105
Small C&I	1,694,207	621,705	2,315,913	2,371,676	4,687,589
Medium C&I	3,469,096	1,801,356	5,270,452	5,150,039	10,420,491
Large LLF	1,833,909	825,164	2,659,072	2,767,560	5,426,633
Large HLF	506,517	395,170	901,687	959,805	1,861,491
Extra Large LLF	513,565	314,459	828,024	828,024	1,656,048
Extra Large HLF	2,050,464	1,835,570	3,886,035	3,886,035	7,772,069
C&I Subtotal	10,067,758	5,793,424	15,861,182	15,963,139	31,824,321
Total Firm Throughput	23,327,252	11,295,955	34,623,207	34,886,219	69,509,426
Non-Firm	1,375,000	1,125,000	2,500,000	2,500,000	5,000,000
TOTAL THROUGHPUT	24,702,252	12,420,955	37,123,207	37,386,219	74,509,426
Collections by Sector:					
Residential EE Surcharge Collections	\$835,348	\$612,552	\$1,447,900	\$2,106,554	\$3,554,454
Low Income Weatherization in Base Rates	\$141,344	\$58,656	\$200,000	\$200,000	\$400,000
Total Collections - Residential	\$976,692	\$671,208	\$1,647,900	\$2,306,554	\$3,954,454
Commercial and Industrial EE Surcharge Collections	\$720,893	\$770,172	\$1,491,065	\$2,055,352	\$3,546,417
Total Collections - Commercial and Industrial	\$720,893	\$770,172	\$1,491,065	\$2,055,352	\$3,546,417
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Total Projected Collections	\$1,697,585	\$1,441,380	\$3,138,965	\$4,361,906	\$7,500,871

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Section:

- 1.0: Purpose of Guidelines
- 2.0: Definitions
- 3.0: Eligibility
- 4.0: Cost Effectiveness Standard
- 5.0: Required Plan Elements
- 6.0: Measurement & Verification
- 7.0: Procedures for Initial Plan Approval and Annual Reporting
- 8.0: Coordination with Utility Program

1.0: Purpose of Guidelines

The purpose of this document is to establish the guidelines which will be followed in order to facilitate the filing, review and approval of self-directed gas demand side management programs by manufacturing customers of gas distribution companies in Rhode Island, as provided for in R.I.G.L. 39-2-1.2(f). Such programs will provide incentives to customers for installing DSM measures that they would not have otherwise installed.

2.0: <u>Definitions</u>

- 2.1 <u>Commission</u>: means the Rhode Island Public Utilities Commission.
- 2.2 <u>Demand Side Management ("DSM")</u>: means one or a package of measures consisting of gas energy efficiency, gas conservation, and/or combined heat and power systems.
- 2.3 <u>End –use Customer</u>: means a person or entity in Rhode Island that purchases and uses natural gas.
- 2.4 <u>Manufacturing</u>: means and includes manufacturing, compounding, processing, assembling, preparing or producing. Manufacturers which are considered to be engaged in manufacturing for purposes of R.I.G.L. 44-18-30 and R.I.G.L. 44-13-35 shall be considered to be engaged in manufacturing for the purposes of the guidelines herein.
- 2.5 <u>Measurement & Verification ("M&V")</u>: means measurements and calculations used to determine the level of energy and other resource savings attributable to a particular DSM measure or program.
- 2.6 Other Customer Funds: means the portion of funds that the customer contributes to the Self-Directed Program budget over and above that portion which represents the Self-Directed Funds in a given year.
- 2.7 <u>Self-Directed Funds</u>: means the amount of funds which the customer would have paid to the utility under the gas energy efficiency surcharge in the absence of the Self-Directed Program, but instead is allocated to the Self-Directed Program budget.

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- 2.8 <u>Self-Directed DSM Program (or "Self-Directed Program")</u>: means the set of activities undertaken by a Manufacturing End-use Customer to identify, implement, and verify the savings associated with a set of DSM measures using funds that the customer would otherwise have paid the Utility under the gas energy efficiency surcharge.
- 2.9 <u>Utility</u>: means the regulated natural gas distribution utility which serves the End-use Customer that is submitting the Self-Directed Program for certification, unless specifically noted otherwise.

3.0: Eligibility

- 3.1 Natural gas used for Manufacturing processes (as defined in Section 2 of these guidelines) is eligible to be exempted from the demand-side management charge from the gas distribution utility according to the provisions of these guidelines, subject to the Commission's approval of a Self-Directed DSM Program.
- 3.2 Natural gas consumption is billed according to usage measured by meters. In the event that a meter has mixed usage whereby some natural gas usage recorded by that meter is used for manufacturing processes, and other gas is not, these guidelines adopt the practice of the Division of Taxation whereby it generally deems 95% of the manufacturer's volumes to be for "manufacturing use". If consumption is separately metered for manufacturing use only, the entire amount will be included as natural gas used for manufacturing.
- 3.3 Eligible measures for the purposes of Commission approval of a Self-Directed DSM Program shall include cost-effective energy efficiency, conservation, and combined heat & power systems, consistent with the provisions of R.I.G.L. 39-2-1.2 concerning the utility DSM program. Cost-effectiveness standards are provided in Section 4 of these guidelines.
- 3.4 The Self-Directed DSM Program must be in effect for a minimum of two years.
- 3.5 The Self-Directed DSM Program budget shall be funded to at least the same level (within 2%) as the equivalent payments the customer would have made if the manufacturing natural gas usage for that customer had not been exempted from the utility gas energy efficiency surcharge. The default procedure for determining this funding level shall be to use the previous 12 months gas decatherm consumption applied to the current energy efficiency charge (cents per decatherm). These funds are referred to as Self-Directed Funds. The customer may provide additional funds to the Self-Directed Program budget in any given year, and these additional funds are referred to as Other Customer Funds.

4.0: <u>Cost-Effectiveness Standard</u>

4.1 This section describes the cost-effectiveness standard that is to be applied to Self-Directed DSM Programs by Manufacturing End-use Customers, and no precedent is

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implied or granted to use this standard for any other utility DSM programs. Since by its nature self direct programs do not involve utility rebates or administrative expenses, the current¹ cost-effectiveness test used in Rhode Island for utility programs is not applicable for self-directed programs.

- 4.2 The cost-effectiveness of Self-Directed DSM Programs will be determined using the Total Resource Cost ("TRC") test. The TRC test assesses whether or not the demand-side management program or measure improves economic efficiency in the broad sense of the term². The test is applicable to conservation, load management, and fuel substitution programs. The TRC test represents the combination of the effects of a program on both the customers participating and those not participating in a program. The TRC test is the primary test used to screen most gas DSM programs in the United States³.
- 4.3 Incremental costs refer to the additional cost of the energy efficient measure compared to standard practice. Incremental savings is the difference between the energy use of the recommended measure compared to standard practice.
- 4.4 The benefits calculated in the TRC test value the expected incremental savings using the avoided supply costs the reduction in delivery, capacity, and commodity costs valued at marginal cost for the periods where there is a load reduction. For fuel substitution programs, benefits include the avoided device costs and avoided supply costs for the energy-using equipment not chosen by the program participant.
- 4.5 The costs in the TRC test are the incremental program costs paid by both the utility and the participants, plus the increase in supply costs for the periods in which load is increased. Therefore, all incremental equipment, installation, operation and maintenance costs, cost of removal (less salvage value), and administration costs, no matter who pays for them, are included in this test. For fuel substitution programs, the costs also include the increase in supply costs for the utility providing the fuel that is chosen as a result of the program. The TRC test excludes any transfer payments between parties. Thus incentive payments by the utility to encourage participation are excluded from the calculation.
- 4.6 Measures shall be considered cost-effective if they achieve a benefit-cost ratio above one (1.0). The benefit-cost ratio is the ratio of the discounted total benefits of the program or measure to the discounted total costs over some specified time period (by convention the lifetime of the impacts produced by the measure). A benefit-cost ratio above one indicates that the program or measure is beneficial to the utility and its ratepayers on a total resource cost basis.

¹ Calendar year 2007.

² The Total Resource Cost (TRC) test is formally defined in Chapter 4 of the California Standard Practice Manual, Economic Analysis of Demand Side Programs and Projects (October 2001).

³ See, for example, the report entitled "DSM in North American Gas Utilities", prepared for Enbridge Gas Distribution by IndEco Strategic Consulting Inc. and Navigant Consulting Ltd., April 2004.

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- 4.7 Avoided costs used for the cost-effectiveness calculations shall be those provided by the gas utility and/or electric utility (as the case may merit, for example, with combined heat and power systems) in that utility's most recent DSM filing with the Commission.
- 4.8 For purposes of cost-effectiveness, pre-installation measure savings estimates shall be those reported to the Commission by the Professional Engineer ("PE") conducting a technical assessment that identifies and specifies the DSM measures. These savings estimates shall be calculated in a manner consistent with generally accepted engineering practices comparable to the practices employed by the gas distribution utility administering energy efficiency programs in the state.
- 4.9 The Self-Directed DSM Program shall only include measures which meet the definition of demand side management (DSM), namely those which fall under the categories of energy efficiency, conservation, and/or combined heat and power systems, have a reasonable payback period, and are cost-effective according to the TRC test. The purpose of the reasonable payback period is to ensure that the program encourages measures that would not have been implemented otherwise.

5.0: Required Plan Elements

- 5.1 In making application for certification of a self directed program, the applicant shall provide the Commission a **Manufacturing Self-Directed DSM Program Eligibility Application**, which shall contain the following information:
 - (i) Name, contact information, and gas utility account numbers addressed by the program.
 - (ii) Period for which the proposed program will be in force (must be at least 24 months).
 - (iii) Proof that the accounts meet eligibility requirements.
 - (iv) Description of DSM measures to be included in the plan, and expected savings of natural gas and other resources (as applicable).
 - (v) Funding levels by year, for both Self-Directed Funds and Other Customer Funds.
 - (vi) Annual program budget by category:
 - a. Administrative
 - b. Audit and Technical Assessment
 - c. Measure costs (professional services, labor, equipment & materials)
 - d. Measurement & Verification costs
 - (vii) Measurement & Verification ("M&V") plan for program.
 - (viii) .Cost effectiveness estimate for measures to be installed.

6.0: Measurement & Verification

- Program shall include pre-inspection by a PE and post-inspection by an independent third party not associated with either the customer or the firm installing the measures.
- 6.2 Energy savings are calculated according to industry standard methods by the independent third party per 6.1. See Section 4.0.

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- 6.3 Program shall assign appropriate M&V methods to specific measures.
- 6.4 Acceptable M&V methods are those which are described in the most recent version of the International Performance Measurement & Verification Protocol.
- 6.5 The Commission shall ensure that parties performing M&V work are appropriately qualified and meet qualifications comparable to those individuals performing M&V for the gas distribution utility.

7.0: Procedures for Program Approval and Annual Reporting

7.1 Program approval by the Commission

The Commission will approve and certify, or deny, Self-Directed DSM Programs by issuing statements of qualification within ninety (90) days of application. The following procedure will be followed to complete the review and certification:

- (i) Applicants for certification of Self-Directed DSM Programs must submit an application to the Commission which conforms to the requirements of Section 5.1 above
- (ii) The Commission Clerk will keep a list of interested parties who wish to be notified when an application for certification is filed. Such list will include the Division of Public Utilities and Carriers. In addition to filing with the Commission, applicants are required to send, either electronically or in paper copy, a copy of the completed application, including any attachments, to the interested parties. The Commission Clerk will post all completed Manufacturing Self-Directed DSM Program Eligibility applications, including all attachments, on the Commission website.
- (iii) The Commission may request additional information or clarification regarding the application.
- (iv) Any party in interest may comment on such filings to the Commission in writing within 30 days from the date of filing. Following the 30-day comment period, the Commission will consider an application for certification in an open meeting. The Commission may approve the application or request at that time, or it may set the matter down for hearing following not less than 10-day notice to the interested parties.
- (v) The Commission will establish a unique certification number for each Self-Directed DSM Program.

7.2 The Commission will verify the on-going eligibility of Self-Directed DSM Programs, as follows:

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- (i) Customers with Self-Directed DSM Programs shall file annual reports by May 1 of the year following the program year. Such reports shall contain the following items:
 - a. Description of measures installed in the program during that calendar year;
 - b. Estimate of gas savings, and other resource savings (where applicable), produced by the measures installed, based on the post-installation inspection conducted by an independent third party. (See 6.1.)
 - c. Expenditures during the calendar year, with true-up to projected budget.
 - d. Benefit-cost ratio showing cost-effectiveness of measures installed
 - e. Summary findings from any M&V work completed during the calendar year.
 - f. Plans for the ensuing year, if applicable, including:
 - (i) Budget
 - (ii) Targeted Measures
 - (iii) Cost-effectiveness
 - (iv) M&V Plan
- (ii) The Commission may request other information as desired in its certification order.
- (iii) The Commission or persons acting at its behest may conduct audits or site visits to assist in verification at any time at the Commission's discretion.
- 7.3 End-use Customers, once their program is certified, shall notify the Commission in the event of a change in eligibility status. When and if, in the Commission's opinion, after due consideration, there is a material change in the characteristics of the program or facility that could alter its eligibility, such Self-Directed DSM Program must be recertified. Recertification of a Self-Directed DSM Program will be conducted in the same manner as the certification process outlined above.
- 7.4 Suspension or Revocation: The Commission may suspend or revoke the certification of a Self-Directed DSM Program, certified in accordance with Section 7.1, that is found, after notice and an opportunity for hearing, to provide false information, or that fails to notify the Commission in the event of a change in eligibility status or otherwise comply with law or these guidelines.
- 7.5 Advisory Committee: The Commission may, at its discretion, create an advisory committee to assist it in its administration of the program.

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8.0: Coordination with Utility DSM Program

- 8.1 Within thirty days of Commission receipt of an application for certification of a Self-Directed DSM Program, the utility shall conduct a true-up analysis which compares customer incentives provided by the utility under its DSM program for the previous 24 months to customer and DSM charge payments made during that same 24 month period. In the event that rebates or other incentives exceed customer payments, customer shall have the option of either (a) delaying implementation of the Self-Directed DSM Program until such time as payments equalize rebates or other incentives, or (b) repaying the utility for the portion by which rebates or other incentives exceeded payments.
- 8.2 Customer facilities which participate in the Self-Directed DSM Program are ineligible to receive services under the utility DSM program during the period for which the Self-Directed DSM Program is in effect.
- 8.3 Within 30 days of Commission certification of the Self-Directed DSM Program, the utility shall stop applying the DSM charge to the bills of accounts which are included in that Self-Directed DSM Program.
- 8.4 If actual expenditures are less than the approved Self-Directed Funds budget for a calendar year, the customer must either carry the funds over and spend them in the next calendar year, or contribute such funds to the utility DSM program. In no event can a customer carry over funds in two successive calendar years.

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National Grid Gas Energy Efficiency Program Budget (\$000) 2007 - 2008

	Program Planning &	& Administration				
Program	External(1)	Internal	Marketing	Rebates and Other Customer Incentives	Evaluation & Market Research	Grand Total
RESIDENTIAL:						
ENERGY STAR Homes	\$100.0	\$2.7	\$37.5	\$71.9	\$4.1	\$216.2
Building Practices and Demonstration Program	\$4.0	\$0.5	\$25.0	\$24.0	\$1.3	\$54.8
Energy Analysis: Internet Audit Program	\$0.2	\$0.0	\$1.1	\$2.5	\$0.0	\$3.9
Total Building Practices and Demonstration Program	\$4.2	\$0.5	\$26.1	\$26.5	\$1.3	\$58.7
ENERGY STAR Heating System	\$41.0	\$8.0	\$37.5	\$482.3	\$13.3	\$582.0
GasNetworks	\$0.0	\$0.0	\$45.6	\$0.0	\$0.0	\$45.6
Energy Analysis: Internet Audit Program	\$2.6	\$0.4	\$11.6	\$28.0	\$0.0	\$42.5
Total ENERGY STAR Heating System	\$43.6	\$8.4	\$94.6	\$510.3	\$13.3	\$670.1
High-Efficiency Water Heating Program	\$17.6	\$2.2	\$37.5	\$118.9	\$4.2	\$180.3
GasNetworks	\$0.0	\$0.0	\$13.9	\$0.0	\$0.0	\$13.9
Energy Analysis: Internet Audit Program	\$0.8	\$0.1	\$3.6	\$8.6	\$0.0	\$13.1
Total High-Efficiency Water Heating Program	\$18.4	\$2.3	\$55.0	\$127.5	\$4.2	\$207.4
ENERGY STAR Programmable Thermostat Program	\$11.0	\$1.0	\$37.5	\$42.8	\$2.2	\$94.5
GasNetworks	\$0.0	\$0.0	\$7.6	\$0.0	\$0.0	\$7.6
Energy Analysis: Internet Audit Program	\$0.4	\$0.1	\$1.9	\$4.6	\$0.0	\$6.9
Total ENERGY STAR Programmable Thermostat Program	\$11.4	\$1.0	\$46.9	\$47.4	\$2.2	\$109.0
EnergyWise	\$0.0	\$41.9	\$75.0	\$830.3	\$22.9	\$970.2
Energy Analysis: Internet Audit Program	\$4.2	\$0.7	\$19.4	\$46.3	\$0.0	\$70.5
Business Energy Analyzer	\$5.6	\$0.8	\$19.9	\$57.9	\$0.0	\$84.2
Total EnergyWise	\$9.8	\$43.4	\$114.2	\$934.5	\$22.9	\$1,124.9
Single Family Low Income Services	\$0.0	\$33.7	\$12.5	\$1,353.4	\$36.4	\$1,436.0
EERMC - Residential	\$82.6	\$0.0	\$0.0	\$0.0	\$0.0	\$82.6
Shareholder Incentive	\$0.0	\$171.8	\$0.0	\$0.0	\$0.0	\$171.8
Subtotal - Residential	\$270.0	\$263.9	\$386.9	\$3,071.5	\$84.5	\$4,076.7

National Grid Docket No. 3790 Gas Energy Efficiency Programs Attachment 6 Page 2 of 2

National Grid Gas Energy Efficiency Program Budget (\$000) 2007 - 2008

	Program Planning &	k Administration				
Program	External(1)	Internal	Marketing	Rebates and Other Customer Incentives	Evaluation & Market Research	Grand Total
COMMERCIAL AND INDUSTRIAL:						
Commercial High Efficiency Heating Program	\$20.0	\$5.8	\$37.5	\$325.2	\$9.7	\$398.2
GasNetworks	\$0.0	\$0.0	\$13.2	\$0.0	\$0.0	\$13.2
Total Commercial High Efficiency Heating Program	\$20.0	\$5.8	\$50.7	\$325.2	\$9.7	\$411.5
Economic Redevelopment Program	\$20.0	\$5.2	\$37.5	\$284.2	\$8.7	\$355.6
Building Practices & Demonstration Program	\$15.0	\$4.4	\$37.5	\$244.6	\$7.4	\$308.8
The Emerald Network	\$10.0	\$2.3	\$37.5	\$126.8	\$4.2	\$180.8
Commercial Energy Efficiency Program	\$50.0	\$13.4	\$37.5	\$740.2	\$22.4	\$863.6
Energy Audit and Engineering Services	\$7.5	\$3.7	\$37.5	\$212.1	\$6.3	\$267.1
GasNetworks	\$0.0	\$0.0	\$15.6	\$0.0	\$0.0	\$15.6
Business Energy Analyzer	\$5.0	\$0.8	\$17.6	\$51.6	\$0.0	\$74.9
Total Commercial Energy Efficiency Program	\$62.5	\$17.9	\$108.2	\$1,003.9	\$28.7	\$1,221.2
Trade Ally Training Program	\$6.0	\$1.0	\$37.5	\$67.3	\$0.0	\$111.7
EERMC - C&I	\$67.6	\$0.0	\$0.0	\$0.0	\$0.0	\$67.6
Commitments	\$0.0	\$0.0	\$0.0	\$650.0	\$0.0	\$650.0
Shareholder Incentive	\$0.0	\$116.9	\$0.0	\$0.0	\$0.0	\$116.9
Subtotal - Commerical & Industrial	\$201.0	\$153.5	\$309.0	\$2,701.9	\$58.7	\$3,424.2
Grand Total	\$471.0	\$417.4	\$695.9	\$5,773.4	\$143.2	\$7,500.9

Note: (1) A portion of the External Program Planning and Administration budget includes funds that National Grid anticipates paying to Keyspan for their help in administrating these programs. If and when the merger with Keyspan is complete, these costs will become Internal Program Planning and Administration expenses.

National Grid Docket No. 3790 Gas Energy Efficiency Programs Attachment 7

Target 2007 - 2008 Shareholder Incentive

Incentive Rate: 4.40%

	(1)	(2)	(3)	(4)	(5)
			Annual		Target
			Savings	Threshold	Incentive
		Target	Goal	Savings	Per
Sector	Budget	Incentive	(MMBTU)	(MMBTU)	MMBTU
Residential	\$3,904,882	\$171,815	90,525	54,315	\$1.898
Commercial & Industrial	\$2,657,257	\$116,919	108,383	65,030	\$1.079
Total	\$6,562,139	\$288,734	198,908	119,345	

Notes:

- (1) Sector budget. See Attachment 6.
- (2) Equal to the incentive rate (4.40%) x Column (1).
- (3) See Attachment 8, Page 3 of 3.
- (4) 60% of Column (3). No incentive is earned on annual MMBTU savings in the sector unless the Company achieves at least this threshold level of performance.
- (5) Column (2)/Column (3)

National Grid Docket No. 3790 Gas Energy Efficiency Programs Attachment 8 Page 1 of 3

2007 and 2008 RHODE ISLAND BENEFIT COST ANALYSIS

Summary of Expected Benefit and Expenses (\$000)

	Rhode Island		Program		
	Benefit/	Total	Implementation	Evaluation	Shareholder
	Cost(1)	Benefit	Expenses(2)	Expenses(2)	Incentive(3)
Commercial & Industrial	Cost(1)	Belletit	Expenses(2)	Expenses(2)	incentive(3)
		45.050.0	01.150.5	#20.0	37.
Commercial Energy Efficiency Program	5.94	\$7,050.3		\$28.0	NA
Commercial High Efficiency Heating Program	2.78	\$1,111.9		\$9.4	NA
Economic Redevelopment Program	1.08	\$372.7	\$337.0	\$8.5	NA
Trade Ally Training Program	NA	NA	\$108.4	\$0.0	NA
EERMC - C&I	NA	NA	\$65.4	\$0.0	NA
Building Practices and Demonstrations Program	3.68	\$1,103.3	\$292.8	\$7.2	NA
The Emerald Network	1.60	\$280.4	\$171.5	\$4.1	NA
SUBTOTAL	3.68	\$9,918.5	\$2,524.2	\$57.2	\$113.6
Residential Programs					
IN-HOME SERVICES	3.43	\$8,497.6	\$2,419.9	\$57.3	NA
EnergyWise Program	5.95	\$6,496.3	\$1,070.3	\$22.3	NA
Single Family Low Income	1.45	\$2,001.3	\$1,349.6	\$35.0	NA
PRODUCTS & SERVICES	4.45	\$4,276.3	\$940.8	\$19.2	NA
High Efficiency Heating Program	5.10	\$3,326.4	\$639.2	\$12.9	NA
High Efficiency Water Heating Program	2.16	\$434.6	\$197.6	\$4.1	NA
ENERGY STAR® Thermostat Program	4.85	\$515.2	\$104.0	\$2.2	NA
EERMC - Residential	NA	NA	\$80.0	\$0.0	NA
Building Practices and Demonstrations Program	1.27	72.19	\$55.4	\$1.3	NA
ENERGY STAR® Homes	NA	NA	\$206.5	\$4.0	NA
SUBTOTAL	3.25	\$12,846.0	\$3,702.5	\$81.8	\$166.5
TOTAL	3.43	\$22,764.6	\$6,226.7	\$138.9	\$280.1

Notes:

- The Rhode Island Benefit/Cost Test is equal to the expected dollar value of lifetime resource benefits divided by the sum of Implementation Expenses, Evaluation Expenses, and the target shareholder incentive.
- Equal to the Net Present Value of the budget amounts provided in Attachment 6.
 Subtotal and Total rows include expenses for all line items whether or not benefits have been quantified.
- 3) See Attachment 7.

National Grid Docket No. 3790 Gas Energy Efficiency Programs Attachment 8 Page 2 of 3

2007 and 2008 RHODE ISLAND BENEFIT COST ANALYSIS

Summary of Benefits

	Benefits (\$000)		MMBTU Gas Saved		
Commercial & Industrial	Total(4)	Natural Gas(5)	Participant Resource(6)	Annual(7)	Lifetime(8)
Commercial Energy Efficiency Program	\$7,050	\$7,050	\$0	82,122	1,010,096
Commercial High Efficiency Heating Program	\$1,112	\$1,095	\$17	8,500	166,676
Economic Redevelopment Program	\$373	\$373	\$0	4,341	53,394
Trade Ally Training Program	NA	\$0	\$0	0	0
EERMC - C&I	NA	\$0	\$0	0	0
Building Practices and Demonstrations Program	\$1,103	\$1,103	\$0	10,154	138,093
The Emerald Network	\$280	\$280	\$0	3,266	40,174
SUBTOTAL	\$9,919	\$9,902	\$17	108,383	1,408,433
Residential Programs IN-HOME SERVICES					
EnergyWise Program	\$6,496	\$6,496	\$0	42,631	852,622
Single Family Low Income	\$2,001	\$2,001	\$0	14,465	260,366
PRODUCTS & SERVICES	7-,000	4-,000	7.7	- 1,100	
High Efficiency Heating Program	\$3,326	\$3,326	\$0	24,042	432,765
High Efficiency Water Heating Program	\$435	\$435	\$0	2,869	57,375
ENERGY STAR® Thermostat Program	\$515	\$515	\$0	6,160	61,600
EERMC - Residential	NA	\$0	\$0	0	0
Building Practices and Demonstrations Program	\$72	\$42	\$30	358	5,370
ENERGY STAR® Homes	NA	\$0	\$0	0	0
SUBTOTAL	\$12,846	\$12,816	\$30	90,525	1,670,098
TOTAL	\$22,765	\$22,718	\$47	198,908	3,078,531

Notes:

- 4) Equal to the sum of Natural Gas benefits and Participant Resource benefits.
- 5) The value of lifetime natural gas savings valued using the avoided gas costs quantified in "Avoided Energy Supply Costs in New England," December 23, 2005 prepared by ICF Consulting for the Avoided-Energy-Supply-Component Study Group. This is also the source of the electric avoided costs that have been used to assess electric energy efficiency program cost-effectiveness.
- 6) Participant Resource Benefits are equal to the dollar value of expected electricity savings that have not been included in National Grid's electric energy efficiency plans for 2007.
- 7) The projection of annual savings reflects results attained for similar programs in other jurisdictions.
- 8) Lifetime savings are equal to annual savings multiplied by the expected life of measures expected to be installed in each program.

National Grid Docket No. 3790 Gas Energy Efficiency Programs Attachment 8 Page 3 of 3

SAVINGS AND PARTICIPATION GOALS BY PROGRAM

	Annual Energy Savings (MMBTU Natural Gas)(1)	Participants
Program		
Commercial & Industrial		
Commercial Energy Efficiency Program	82,122	176
Commercial High Efficiency Heating Program	8,500	225
Economic Redevelopment Program	4,341	10
Trade Ally Training Program	NA	500
EERMC - C&I	NA	NA
Building Practices and Demonstrations Program	10,154	4
The Emerald Network	3,266	7
SUBTOTAL	108,383	922
	12 631	1 888
Residential Programs IN-HOME SERVICES		
EnergyWise Program	42,631	1,888
Single Family Low Income	14,465	336
PRODUCTS & SERVICES		
High Efficiency Heating Program	24,042	1,475
High Efficiency Water Heating Program	2,869	375
ENERGY STAR® Thermostat Program	6,160	1,400
EERMC - Residential	NA	NA
Building Practices and Demonstrations Program	358	5
ENERGY STAR® Homes	NA	NA
SUBTOTAL	90,525	5,479
TOTAL	198,908	6,401

Note:

1) See Attachment 8, Page 2 of 3.

Certificate of Service

I hereby certify that a copy of the cover letter and / or any materials accompanying this certificate has been mailed or hand-delivered to the individuals listed below.

Joanne M. Scanlon

April 2, 2007 Date

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